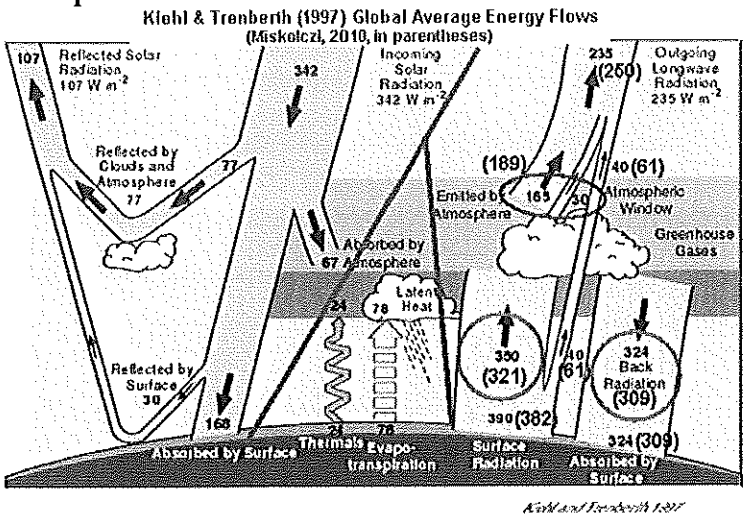
Energy Flow Diagrams

1.1.8 Distinguish between flows (inputs and outputs) and storages (stock) in relation to systems.
1.1.9 Construct and analyze quantitative models involving flows and storages in a system.
1.1.10 Evaluate the strengths and limitations of models
1.1.7 Describe transfer and transformation processes
2.5.3 Describe and explain the transfer and transformation of energy as it flows through an ecosystem

Examples:



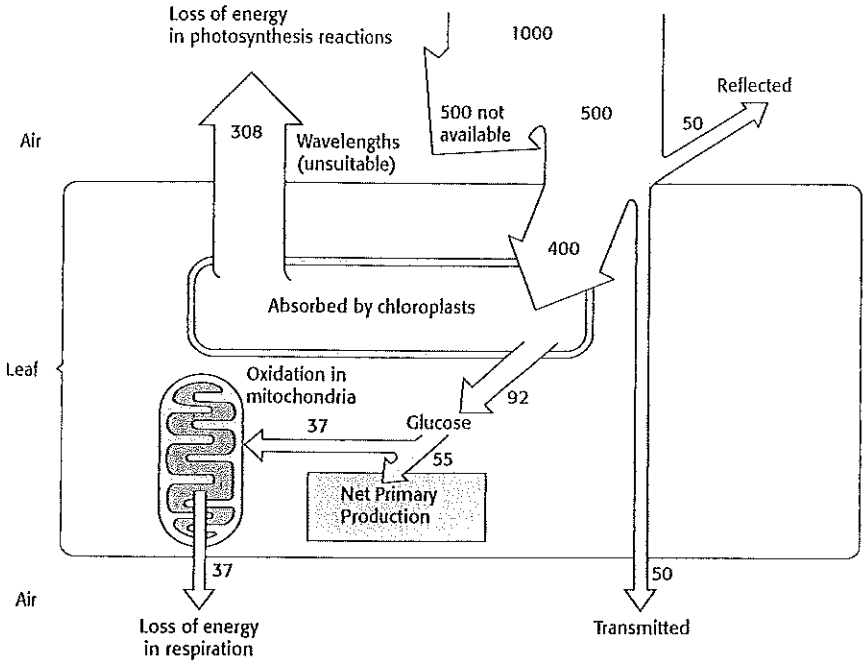


Fig. 3.36 Photosynthetic efficiency of a crop plant. This is based on the input of 1000 units of solar radiation

- Stores of Energy shown as squares or other shapes.
- Flows are arrows - the width can indicate how much biomass or productivity.

*Evaluating Models

- Pros - allow predictions & simplification of complex systems
- can play w/ inputs to see the impacts.
- Results are easy to present.

Cons

- May not be complex
- Rely on expertise of people making them.
- different interpritations
- easy to hijack for political reasons
- only as good as the data
- different models can be made from same data

Sanky Diagrams